

1 **Reflections on engagement from a community liaison committee for a zinc mine in rural**  
2 **South Australia**

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4  
5 **Abstract**

6  
7 Conflicts between mining operators and local communities often stem from the latter feeling  
8 excluded from decision-making processes. Consequently, regulators sometimes commission  
9 a representative consultative group to facilitate interactions among the wider community,  
10 miners and regulators. The realised effectiveness of this sort of representative group,  
11 however, has rarely been assessed from the perspectives of community participants. We  
12 interviewed members of a long running consultative committee for a zinc mine in rural South  
13 Australia. Initially, the town's inexperience with mining meant many held negative views about  
14 potential environmental impacts of mining. Those fears were allayed as the mine developed  
15 and the committee felt they better understood and could question the mine's technical  
16 operations. Over time, the committee felt their input led to significant changes in a range of  
17 mine operations and, while perceiving their committee's role differently, all thought it effective  
18 and strengthened their relationship with the mine operator and regulators. Nonetheless, some  
19 negative interactions from the initial stages of engagement have lingered. We conclude that if  
20 community trust is gained by operators and efforts are made to help communities understand  
21 mining, then consultative committees can play a central role in ensuring that people do not  
22 feel disenfranchised by mining operations.

23  
24 **Key Words**

25  
26 Stakeholder engagement; Social Licence to Operate (SLO); Community Consultative  
27 Committee; Mine closure; Corporate Social Responsibility

## 30 1. INTRODUCTION

31 A key factor causing the emergence of social conflicts in mining is a lack of participation of  
32 local communities in decision-making processes, which in some communities can build on a  
33 distrust of mining companies and governmental regulators (CSIRO, 2014; Conde, 2017). The  
34 concerns expressed by local communities about mining are the product of perceived impacts  
35 on the environment weighed against the local social-economic benefits/costs of extracting  
36 resources, moderated by the relationships that exist between the community and miners  
37 (Moffat & Zhang, 2014). Thus, contested issues can sometimes be driven by trust, or lack  
38 thereof, among the parties involved and resolutions prevented by the weakness of these  
39 relationships. Hence, an overly negative perception of impacts by local communities can  
40 potentially be caused by a poor consultation experience with miners, even persisting from the  
41 start of engagement, years before a mine actually becomes operational (Walsh, et al., 2017).  
42 Whilst no amount of goodwill can necessarily ameliorate all concerns, nor should concerns be  
43 minimised if predicted impacts warrant attention, access to early information and participation  
44 in the decision-making process can ensure that the community feels empowered and may  
45 lead to greater trust on the part of both company and regulator (Booth & Halseth, 2011). In  
46 general, increased public participation during the planning and early stages of a mine's life will  
47 positively impact community perceptions of environmental and social issues (Booth & Halseth,  
48 2011; Moffat & Zhang, 2014), although there is ongoing debate about what factors truly  
49 motivate engagement with communities by the mining industry (Kemp & Owen, 2013).

50 Community consultative groups are often created by government agencies to facilitate the  
51 interaction between mining companies, the community and state regulators (Department of  
52 Planning and Environment, 2018). These committees are described in several international  
53 best practice guidelines for the industry, such as the International Finance Corporation  
54 Performance Standards (IFC PS), where they are an integral part of the required  
55 Environmental and Social Management System under PS1, Risk Management (IFC, 2015).  
56 Broadly, the role of community consultative groups is to relay information, concerns and  
57 responses among the community, miners and regulators, although the aims of specific groups  
58 differs by project and among jurisdictions. For example, the committee for a nickel mine at  
59 Ravensthorpe in Western Australia was put in place to assist the town in adapting to the onset  
60 of large-scale mining in the region (Mayes, 2015). Whilst the committee of the Kanmantoo  
61 copper mine in South Australia has a broader stated purpose: "*ensure effective and ongoing*  
62 *communication and consultation process with the local community*" (Department of State  
63 Development, 2014). Regardless of specific aims, a key function of all such groups is to help  
64 ensure that public contributions are valued as part of the decision-making process (Booth &  
65 Halseth, 2011).

66 Formal community consultative committees are now becoming common across the mining  
67 industry in Australia and worldwide (Department of Planning & Environment, 2018). However,  
68 this was not always the case. One of the first community consultation groups was formed in  
69 South Australia in 2003, during the exploration phase of a magnesite project in a  
70 farming/rangelands area (Horn & Miller, 2004). In that case, the group was considered  
71 successful in educating community members about their potential future development and  
72 addressing community concerns to create collaborative declaration of environmental factors  
73 (Horn & Miller, 2004). Other studies on consultative groups have focussed on ‘classic’ mining  
74 towns (McDonald, et al., 2012; Ntema, et al., 2017; Ott, 2017), where the entire economy is  
75 much more reliant on the commodity and has been that way for generations. None of these  
76 studies have specifically interviewed consultative committee members about their experiences  
77 on such committees, how participation in a consultative group subsequently influences  
78 community members’ perceptions about mining or how their participation may affect the  
79 relationship between miners and their stakeholders over time.

#### 80 **1.1 Angas Zinc Mine Case Study**

81 The Angas Zinc Mine (AZM) provides a unique opportunity to assess the effectiveness of  
82 community engagement four years post-closure of mining operations. The mine is located on  
83 the Fleurieu Peninsula, South Australia approximately 60 km south-east of the state capital  
84 Adelaide (population ~ 1.3 million) and 3 km from the rural town of Strathalbyn. Terramin  
85 Australia Ltd. (Terramin) acquired the deposit in 1991 and has since owned and operated the  
86 project. The mining licence was awarded in 2006 and the first ore was mined later the same  
87 year. The AZM entered care and maintenance in 2013 following a prolonged drop in metal  
88 prices, resulting in the retrenchment of 115 people (Harris et al., 2014). During operations, the  
89 site consisted of underground access, a polymetallic float processing plant and tailings storage  
90 facility (TSF) (Terramin, 2017). Whilst much of the underground workings have been  
91 backfilled, the processing plant is still present on site. The possibility of reutilising this facility  
92 to process gold from the nearby Bird-in-Hand project, 35 km to the north, is currently being  
93 considered (Terramin, 2017). The AZM still has an existing indicated and inferred resource of  
94 1.2 million tons at 5.8% Zinc and Lead.

95 The town of Strathalbyn has a population of 6,500 (Australian Bureau of Statistics, 2016). Prior  
96 to the opening of the AZM the Strathalbyn economy was, to a significant extent, dependent  
97 on agriculture and on those working in nearby urban areas, such as Adelaide, but living and  
98 spending their income in the town. There is little other mining activity in the region (SA Centre  
99 for Economic Studies, 2006) and, as such, Strathalbyn would not be classified as a typical  
100 Australian “mining town” (Ecklund 2015) or dependent economically on mining. There has  
101 been a complex and dynamic relationship between the local Strathalbyn community and

102 Terramin, with a distinct anti-mining presence in Strathalbyn at the start of operations,  
103 appearing regularly in the local media at the time. It must be noted, however, that the level of  
104 anti-mining resistance might still be considered relatively low (c.f. Conde & Le Billon, 2017).  
105 In response, the Strathalbyn Community Consultative Committee (SCCC) was decreed by the  
106 state government minister responsible for mining in 2006.

107 The committee generally consists of eleven members, representing several stakeholders:  
108 local businesses, schools, doctor, council representatives and other community members.  
109 Whilst some of the current members have been present since the inception of the committee,  
110 others have left or joined as the project developed. The committee initially met monthly, though  
111 for most of the mine life they have met in public, quarterly. The purpose and aim of the SCCC  
112 is laid out in their Terms of Reference, which are to raise and discuss any issues that have  
113 been brought to light regarding the AZM, acting as a forum for engagement between Terramin  
114 and the local community (Terramin, 2015).

115 This case study therefore provides a unique opportunity to assess, post-closure, perceptions  
116 about the effectiveness or otherwise of a community consultative committee in an area with  
117 limited experience of mining and where there had been high levels of community concern prior  
118 to mining. Specifically, we investigated the effectiveness of the community consultation from  
119 the committee's perspective by interviewing members about their views on four key areas, as  
120 follows:

- 121 • Their perceived and realised environmental concerns, and how these were dealt with  
122 across the mine life;
- 123 • How the engagement strategy implemented by the mining company was received by  
124 the community;
- 125 • How they saw the effectiveness of the Community Consultative Committee; and
- 126 • Whether they had any recommendations for similar future committees set up  
127 elsewhere, based on their personal experiences on the committee.

128 By doing this, we aimed to investigate how committee members saw their role as well as what  
129 they thought might be learnt, given this experience, for future community engagement  
130 initiatives involving similar committees, miners and government regulators.

## 131 132 **2. METHODOLOGY**

133 This study used semi-structured, iterative interviewing - aiming to seek, explore, describe and  
134 analyse the experience of individuals (Tracy, 2013; Marshall & Rossman, 2016) - interviewing  
135 eight of the current eleven members of the SCCC. Interviews took place over a three-week

136 period in 2017, primarily in the homes of each participant, though public establishments and  
137 a participant's workplace were used in three cases. The interviews each lasted between 40  
138 and 90 minutes. During the interviews, participants were given the opportunity to talk about  
139 their experience of the AZM and SCCC, requiring little prompting in most cases.

140 A topic guide, used for interviews, was developed by reading and summarising minutes from  
141 committee meetings from 2006 through to 2017, a total of 49 sets. Across all of the meetings,  
142 key environmental issues were identified as being the TSF, trucks and dust, and noise and  
143 blasting. Further to this, any comments regarding communication between Terramin and the  
144 community were recorded. Completing this allowed for the creation of a topic guide and  
145 questions for interviews. Minutes provided a summary of environmental concerns; therefore,  
146 the topic guide focused on the perception committee members had of the SCCC through  
147 analysis of their background, reason for joining, preconception of environmental concerns and  
148 how these were dealt with. The success in dealing with these concerns, informing the wider  
149 community and how a CCC could be implemented elsewhere with improvements made were  
150 also covered. Although following the topic guide, questions were adapted and adjusted during  
151 interviews to reflect emerging themes and the interviewee's interests.

152 We used a content, or framework, method to analyse the interviews, identifying themes and  
153 generating a matrix from the transcribed statements (Mayring, 2000; Moerman, 2017). A  
154 criterion was formulated based upon the research questions and a feedback loop (Mayring  
155 2000), was implemented to deduce the four key themes: Environment, Mine Closure,  
156 Engagement Strategy, and the Effectiveness of the SCCC. Interviews focused around these  
157 topics, using the prevalent environmental concerns as a central focus point. The initial  
158 interviews also allowed emergent themes to be identified, and hence influence questions  
159 asked in the preceding interviews.

160

### 161 **3. RESULTS**

162 The eight members interviewed had a range of experience working on the SCCC, ranging  
163 from two to eleven years. Five members had been on the committee since its inception. All  
164 interviewees stated that, prior to the opening of the AZM, they had very little or no experience  
165 of the mining industry. Across the interviews, conversations were focused on the community,  
166 the committee, the mine itself and mine personnel. There was a notable lack of discussion  
167 focused on the regulator, with limited exceptions. To this end, the regulator was rarely  
168 described as a main actor or facilitator in interactions between the mine and the community.

169 **3.1 Environmental Concerns**

170 Environmental concerns were expressed frequently across the interviews, however, there was  
171 a consensus that many of the early concerns of members were not realised. For most  
172 interviewees, this disparity in their concerns could be attributed to an initial gap in their  
173 understanding of the proposed mine. Other early environmental concerns within the broader  
174 community were commonly considered to have been a result of scare mongering, in part  
175 based on a limited knowledge of technical aspects of mining, but also to a level of distrust and  
176 an initial poor relationship with the mine operator and regulator.

177 One example where initial concerns of the community appeared not to have manifested was  
178 disturbance from trucks. Throughout the meeting minutes there were complaints and  
179 examples of concerns regarding the movement of trucks on and away from the site. Although  
180 procedures were put in place to mitigate these issues, at least in the minutes of committee  
181 meetings, truck movements were regularly brought up as items of concern within the  
182 committee. However, during interviews trucks scarcely came up, with two members stating  
183 that the low number and distance from the town would not cause any issues should the  
184 processing plant re-open. Others explained how the mitigation techniques were successful or  
185 did not mention any concern over trucks. Dust and noise were also scarcely mentioned,  
186 although neighbours next to the mine explained their legitimate concern. Across Strathalbyn,  
187 the preconceived fears voiced in early meetings did not eventuate as major issues during  
188 operation according to the interviewed members:

189 *“I lived in the town and you don’t hear a damn thing.”*

190 *“...we had moved into Strath, and to be honest I really couldn’t hear the*  
191 *mine. The drag out and all that was all fixed, so there was nothing coming*  
192 *from the mine.”*

193 One specific part of the mine operations that was brought up in most interviews, however, was  
194 the TSF, which has clearly caused much concern over the life of the mine and continues to be  
195 an issue for many committee members. The TSF was mentioned as a major item on more  
196 than ten occasions in the minutes of the consultative committee meetings and committee  
197 members remembered raising concerns from the design stage about its strength and  
198 durability. Indeed, the committee’s insistence on this issue resulted in additional design  
199 features being put in place; namely, a double lining in the TSF, leading to a more heavily  
200 engineered system than technical experts deemed necessary (J Randford pers. comm.).  
201 Behind issues associated with the engineering of the TSF was a more general concern about  
202 the placement of the TSF and fears that leakage might contaminate the important water  
203 courses in the area, notably the Angas River and Lake Alexandrina. These concerns persist  
204 today, however the committee members felt they had a much better technical understanding

205 of the issues involved. Indeed, a number of interviewees said that it was through meetings  
206 with the mine operator that they had come to a better understanding of the potential for  
207 contamination and acid mine drainage in ground and surface water run-off and the possibility  
208 of associated long-term impacts.

209 Consequently, when the water level in the TSF unexpectedly rose above maximum levels set  
210 under licensing conditions due to a particularly wet period, the community had great concerns  
211 about this and used the SCCC as a method of expressing these concerns to the mine and  
212 regulator. Historically, this issue caused tension between the community and the mine for a  
213 considerable duration (2009 – 2013), which reflected the difficulty the mine had in lowering  
214 the level of water in the TSF. Although the committee members accepted that lowering water  
215 levels whilst maintaining mine operations was technically difficult, they felt that the pressure  
216 they put on the mine and the regulator via the committee was an important factor in the mine  
217 eventually lowering the water levels into compliance with licence conditions. Despite these  
218 actions, some members felt some questions relating to the long-term plans for the TSF remain  
219 unanswered and the length of the process in resolving these has frustrated some committee  
220 members.

221 Once the mine entered care and maintenance, there was a distinct shift in concerns associated  
222 with the TSF. Although the underlying issue of potential contamination remained, the most  
223 prevalent concern of the committee became rehabilitation plans for the TSF. Current plans  
224 involve drying out and then capping the TSF with compacted clay and revegetating the surface  
225 with soil and grasses (i.e. a phytocap; Waste Management Association of Australia, 2006);  
226 Terramin has received an industry award for their design. Several interviewees expressed  
227 questions regarding the technology; though accepting that it may be the best solution  
228 available, they also expressed ongoing doubts regarding engineering and logistics.

229 Although the closure plan has been well described throughout meetings, several members  
230 questioned aspects of this; in particular, who would be responsible for the long term monitoring  
231 of the site once the regulator has signed it off and the company has left. In addition, the  
232 prospect of the company reutilising the processing plant and TSF to process ore from a new  
233 gold mine, 35 km to the north, and trucking in the ore for processing (Harris, et al., 2014;  
234 Terramin, 2017) has raised further questions amongst committee members. Although  
235 disturbance from truck movements was one of the initial environmental concerns held widely  
236 in the community, there now seemed to be little concern about additional trucks bringing in ore  
237 to the site as part of the new enterprise. Again, most concern was now related to more  
238 technical components, such as the TSF, specifically about potentially changing its chemistry  
239 by introducing additional tailings from the new project, but also reflecting an ongoing lack of

240 faith that the regulator and mine operator would be able keep the facility in compliance with  
241 licence conditions, were operations to be started up again.

### 242 **3.2 Engagement Strategy**

243 The engagement strategy used by Terramin was controversial and differing opinions were held  
244 across the committee. The presence of the SCCC was deemed by all to be effective in at least  
245 some respects and the mine's participation in this is seen as a genuine effort to engage with  
246 the community, albeit this had changed and improved markedly over time.

247 The initial community engagement that took place via a town hall meeting was described very  
248 negatively by several participants, with suggestions that it was not carried out in a respectful  
249 manner and that the mine's representative was dismissive of locals. Committee members felt  
250 that the mine's representatives had not understood that locals had little prior experience with  
251 mining and thus were unable to understand much of the information that was presented to  
252 them. Use of technical mining terms and jargon that the community was unfamiliar with was  
253 felt to have magnified fear about potential impacts:

254 *"I am sure it [lack of mining knowledge] did exaggerate the fears a bit, and*  
255 *the senior management of the company really didn't help at the beginning.*  
256 *That changed I think throughout."*

257 *"I think the committee has got on a lot better with Terramin over the last 4/5*  
258 *years. I think this has meant people haven't got so many worries."*

259 *"...he [the mine representative] basically just said we are ignorant pigs and*  
260 *know nothing about mining"*

261

262 The effects of the negative initial engagement experiences have been long-lasting and were  
263 still considered as representative of the company, at that time, rather than individuals, even  
264 though the mine employees directly involved had long since left the company. However, all  
265 but one of the interviewees stated that the engagement strategy carried out by Terramin had  
266 improved significantly over the mine life and that community engagement associated with the  
267 potential to re-open the processing plant to service the new gold mine was being done in a  
268 much more transparent and informative manner. In particular, efforts by the mine operator to  
269 help the community learn about mining were appreciated, along with the company recognising  
270 that the technical mining terms they use in everyday communications amongst workers often  
271 need to be explained when talking to community members.

272 The committee also recognised the efforts implemented by Terramin to provide external  
273 experts and presentations to explain different aspects of the mine. Indeed, they felt they had  
274 been able to develop a deep knowledge and history of the AZM that they may not have



275 otherwise had. This was seen as good community engagement practice, however, there were  
276 some issues with the credibility of experts associated with water management across the site.  
277 Furthermore, the interviewees felt that it took a long time to resolve the non-compliance of the  
278 TSF and to address questions about this and future revegetation plans, which consequently  
279 appeared to lead to a persistent level of distrust in the mine and the regulator, despite other  
280 increasingly positive interactions with the mining company.

### 281 **3.3 Effectiveness of the SCCC**

282 There were differing opinions on the purpose of the SCCC and each person judged the  
283 effectiveness of the SCCC against different, personal criteria. Overall, four key purposes of  
284 the SCCC were identified through the interviews, numbers in brackets are number of  
285 interviewees identifying each purpose:

- 286 • A channel to learn more about the mining industry and process (3);
- 287 • A platform to ask questions, both personal and from the community, a sounding board,  
288 representing the conscience of the community (4);
- 289 • A communication interface, where fair and open discussion can occur between  
290 regulator, miner and community, representing the voice of the community as, per  
291 definition, it is community driven and consultative (5); and
- 292 • A platform to ensure the miners are being honest, keeping mining operations within  
293 regulated limits and ensuring that the regulator is effective in ensuring these aspects  
294 and their ability to communicate this to the wider public (4).

295 Thus, all members identified that the committee was effective in addressing their personal and  
296 broader community concerns about the mine's activities. For most, this was by being a means  
297 through which they could learn more about mining generally or ask questions specifically about  
298 the mine's operations. Additionally, the SCCC provided a focus for dealing with at least some  
299 issues quickly and was evidence that the mine would respond to community concerns. For  
300 example, it was noted that, during blasting, if a complaint was made, the operators responded  
301 quickly and that, consequentially, potential ongoing issues had been avoided. But members  
302 also saw an environmental compliance role for the committee and believe that, without them,  
303 government regulations may not have been adhered to in the same way, or community  
304 concerns dealt with. Indeed, some felt that the remediation techniques put in place, such as  
305 those to reduce the water level in the TSF, would not have occurred without persistence from  
306 the committee.

307 Committee members felt that their committee represented a good cross-section of the  
308 community, with well-connected networks within it, and so was a legitimate group to represent

309 the views of the community and to pass information from the mine back to them. They also  
310 recognised that the regular meetings of the SCCC had been instrumental in breaking down  
311 barriers with mine personnel. They noted that the more aggressive nature of meetings at the  
312 start of the process had lessened as communication became more effective and trust between  
313 the three parties: committee members, government regulator and mine personnel, had built  
314 over time. Indeed, they now saw the mine operators as more approachable and willing to  
315 answer their questions

316 A dominant theme in the discussions about whether the SCCC had been effective was the  
317 shift in engagement practice between the mine and the community over time. To that end,  
318 there appeared to be a decrease in community concern about the mine's activities over time;  
319 a trend that the interviewees interpreted as evidence for the committee having been effective.  
320 Interviewees noted that, at the start of mining operations, there were many questions coming  
321 to them during day-to-day conversations within the community, but that these sorts of  
322 conversations have now become less common, suggesting to them that much of the initial  
323 angst about the mine and potential environmental impacts has been allayed:

324 *"It's not everyone, just people now and then who ask a question about the*  
325 *mine but nowhere near like it was at the beginning."*

326 Indeed, the members suggested that even those who were distinctly anti-mining at the early  
327 stages appeared to have fewer concerns:

328 *"...a lot of those people came to the meetings in the first two or three years,*  
329 *that seems to have scaled right back, though I guess will rise again when*  
330 *there is more mining activity there, people will probably have the same*  
331 *questions or even different ones, I don't know. I think the community is*  
332 *pretty accepting of what has gone on so far."*

333 *"Concerns tailed off after a while, once the committee had been established*  
334 *and most of their concerns had been addressed in one way, shape or form,*  
335 *most of them pulled back."*

336 In fact, rather than widespread community concern, several interviewees perceived most  
337 residents in Strathalbyn appear now to be largely unaware of the mine and operations,

338 *"...a lot of the people in Strath now don't even know there is a mine here. I*  
339 *don't think people are pro or against they just aren't aware."*

340 *"New people only just moved in down the road, they only just got here, a*  
341 *month, they didn't know the mine was even here"*

342 *"The mine doesn't have any impact on the average person in Strathalbyn"*

343 *"You know I don't think most people in this town would even know there*  
344 *was a potential for water contamination."*

345

346 Similarly, apparently limited community concern about the proposal to potentially start up the  
347 facility again to process ore from the new, external, gold mine was also seen as a sign that  
348 Terramin have improved on their engagement strategy. Interviewees suggested this was likely  
349 due to previous pressures from the SCCC and that Terramin have learnt from these –  
350 particularly on aspects such as early engagement, transparency and listening to community  
351 input. Although there was a concern that some issues, particularly regarding noise and  
352 contamination from the TSF will resurface, the committee members felt that there was  
353 generally much less community concern, which indicates that issues are being dealt with in a  
354 more collaborative and respectful manner than at start of the life of mine:

355 *“I just don’t know how much the processing plant sitting on the ground will*  
356 *bring noise. We have talked about regulation and they are keeping us*  
357 *informed on what their processes are.”*

358 *“...but I think people are more prepared to ask questions... I think the*  
359 *committee has helped that way in making people confident enough to say*  
360 *I can’t solve it for you but I can ask the question.”*

### 361 **3.4 Member Recommendations**

362 Based upon their experiences, each interviewee was asked what they would recommend to a  
363 future committee, in terms of aspects that have worked well and suggested improvements for  
364 the SCCC or a similar committee for another mining operation. Two broad themes emerged,  
365 focussed on early engagement strategy and committee structure, largely reflecting the SCCC  
366 as it currently operates and more recent engagement experiences with the mine.

367 Effective and well-informed community consultation from early in the development cycle was  
368 considered vital, along with open communication channels that prevail throughout the process.  
369 Although also covered in other parts of the conversations, education about an otherwise  
370 unfamiliar industry was mentioned specifically in this part of the interviews by three  
371 respondents - noting that access to experts is needed to ensure the technical, e.g. science  
372 and engineering, aspects of the project are fully understood by the committee, which in turn  
373 can help to ensure the community both understands and can allay previously misguided fears  
374 prior to mine commencement.

375 Suggestions for the makeup and running of the committee broadly reflected how the SCCC  
376 currently operates. Five members noted the importance of a mediator or chair who is  
377 independent from the mining company and regulator, and is viewed as not being in favour of,  
378 or against, mining. One person noted the importance of terms of reference, but also that these  
379 should also include prescribed length of tenure, which the SCCC currently does not have.

380 There were also suggestions about attributes of committee members. For example, there was  
381 a view apparent in three interviews that committee members must be locals who are involved  
382 in community activities and have a vested interest in the ongoing mining operations – whilst  
383 also ensuring that, collectively, the committee needs to be representative of the community,  
384 also mentioned in three other interviews. This would presumably also include those not directly  
385 affected by the mine. There was, however, little discussion about how such members should  
386 be selected or appointed.

387 Three interviews noted that committee members need to have a proactive attitude and  
388 approach issues with an open mind. Similarly, another mentioned that committee members  
389 need good communication skills to share information with the wider community, which would  
390 be important for increasing transparency and allaying concerns where they are unfounded.  
391 There was no discussion on whether training in such skills could or should be provided, nor  
392 whether any other training or support was needed in the way the committee functioned. One  
393 member did mention the increasing need for access to the internet and email and that this  
394 was sometimes difficult in a rural location where people may not have easy access to  
395 hardware or connections; they suggested that a tablet or other device might be provided to  
396 help ensure this is possible.

397

#### 398 **4. DISCUSSION**

399 Our interviews revealed that the members of the Strathalbyn Community Consultative  
400 Committee saw their committee as an important vehicle for the Angas Zinc Mine operator,  
401 Terramin, to engage with the local community surrounding their mine in the Adelaide Hills in  
402 South Australia. While members had varying views on exactly how they saw the role of the  
403 SCCC, there was consensus that the committee had been useful for dealing with preconceived  
404 resistance that often precedes a mine development in many parts of the world (Conde, 2017),  
405 particularly in an area with little to no experience of modern mining. There was a consistent  
406 theme from interviews that the community had learnt much about mining through a long (10+  
407 years) and sustained involvement of the SCCC and a belief that Terramin had also probably  
408 learnt a lot about the community in return. Both were now seen as better placed to engage,  
409 albeit there was still a memory of negative early interactions that persisted for some SCCC  
410 members.

411 It was evident throughout the interviews that the community members accept that mining can  
412 potentially bring economic wealth, social and even environmental benefits to a region,  
413 however, most participants did not see much evidence of these benefits occurring at  
414 Strathalbyn. Essentially, interviewees saw the mine as being a peripheral activity in their local

415 community. Consequently, in line with Zhang & Moffat (2015), they did not feel any pressure  
416 to compromise their integrity with respect to environmental concerns because of the potential  
417 economic benefits of the mine. While most felt they knew a lot more about mining from their  
418 tenure on the SCCC, none felt they had become advocates for the mine and still saw their role  
419 as necessary to keep both the company and the regulator in check.

420 There was broad agreement that many of the perceived environmental concerns at the start  
421 of the mine were either dealt with quickly or were not realised, with the exceptions of noise for  
422 nearby neighbours and a single occurrence of high dust levels during construction. Although  
423 members might now dismiss many such concerns as alarmist, they saw past concerns as  
424 legitimate given the low level of understanding of mining that existed previously within the  
425 community and because the information that was given to them did not take this into account.  
426 Nonetheless, it appears that the committee still maintain similar, albeit lessened, fears over  
427 environmental degradation, particularly to do with the long-term management of the TSF. In  
428 part, this may be linked to a fairly lengthy period when the water levels in the TSF rose past  
429 their licenced maximum and the apparent difficulty the mine had in reducing this, despite calls  
430 to do so from the SCCC, as well as fear of the unknown due to the highly technical nature of  
431 the problem and solution. As another example indicating a level of distrust throughout the  
432 interviews, revegetation was identified as having been successful at the AZM, with long term  
433 residents noting, very positively, that the site already has an improved appearance from  
434 previous mining operations due to the abundance of new plantings put in by Terramin.  
435 However, interviewees felt that revegetation would have been far less without the SCCC, so  
436 they saw this as a visible outcome of the effectiveness of their efforts rather than giving credit  
437 for this to the mining company. Indeed, a number of committee members saw part of their  
438 role as keeping a watch on the mine and whether the regulator was enforcing compliance with  
439 licence limitation, and to push for better outcomes than might otherwise occur. Although this  
440 may not have been part of the terms of reference for the SCCC (Terramin, 2015), many on  
441 the committee saw this as a key function.

442 Despite clear evidence that engagement had improved over time and that information from  
443 the mine was now much more readily received, the interviews pointed to a level of ongoing  
444 scepticism about Terramin and the government regulator which appear to have persisted from  
445 initial contact; however, it must also be noted that the regulator was scarcely mentioned during  
446 interviews. This mirrors a study by Walsh et al. (2017), where a lack of trust in a mineral sands  
447 project in rural Australia was rooted in a lack of information being shared, partly because what  
448 information was provided was framed in a technical way that the community could not easily  
449 understand, and also because the community saw the miner as not being forthcoming with  
450 information unless specifically asked. Some of distrust at Strathalbyn also seems to stem from

451 the personalities of key mine personnel involved and/or perceptions of them by the community  
452 in the early stages of development, rather than just what information they did or did not provide.  
453 In three of the interviews, the personalities of regulator, miner and community members were  
454 specifically mentioned in a negative way. Most notably, the company CEO, who was an initial  
455 point of contact with the community was still spoken about negatively, often in comparison  
456 with efforts of subsequent staff that were viewed much more positively. Again, similar  
457 responses occurred in the study by Walsh, et al. (2017) and the same conclusions can be  
458 drawn – mining companies must select representatives for consultation carefully and that early  
459 engagement matters greatly, so must be done well.

460 Across Australia there is a distrust in government regulators of mining and environmental  
461 activities (CSIRO, 2014), which was mirrored here at the AZM. However, this study, amongst  
462 others, illustrates how a somewhat sceptical community can still want a mutually beneficial  
463 relationship with miner and regulator, even when they do not necessarily see great economic  
464 benefits of that activity (Pini, et al., 2010; Walsh, et al., 2017) or, indeed in this case, view the  
465 mine as peripheral to their local community. Irrespective, a mutual understanding from all  
466 parties is vital to success, with proper community engagement and taking the time to explain  
467 and to discuss solutions to technical issues in a way that all stakeholders can participate and  
468 comprehend.

469 Recent studies have emphasised the importance of procedural fairness in underpinning trust  
470 between a company and its community and thus playing a key role in developing a constructive  
471 relationship between a mine and a local community (Lacey, et al., 2017). Communities see  
472 procedures as fair when they feel decision processes are legitimate and, ideally, they also  
473 have opportunity to participate in these processes. In this case, the lack of prior understanding  
474 of mining in the AZM community meant that there was an imbalance in the information  
475 available to different stakeholders, which could be viewed as precluding the community from  
476 participating in decision making in an informed way. This point was repeatedly mentioned in  
477 interviews as a problem for the community. Similarly, the efforts of recent Terramin staff to  
478 provide information the community needed via the SCCC were also reflected on positively in  
479 interviews. Thus, by empowering the community with information they need on mining via the  
480 SCCC, the operator has helped to redress the knowledge imbalance among stakeholders and,  
481 in turn, possibly helped to increase the perception of procedural fairness within the community  
482 (Lacey, et al., 2017).

483 The recommendations made by participants for a future committee reflect previous  
484 recommendations in literature (McDonald, et al., 2012; Lacey, et al., 2017; Walsh, et al., 2017),  
485 and stress the need for early and transparent communication. Similarly, the interviewees  
486 strongly supported having structures such as the SCCC as a legitimate means for the

487 community to communicate with the company. Indeed, many of the recommendations written  
488 under the International Finance Corporation Environmental and Social Management System  
489 guidelines for stakeholder engagement are emphasised by this study, including: starting early  
490 consultation; providing opportunity for two-way dialogue; disclosing meaningful and accurate  
491 information; and documenting to keep track of issues raised (IFC, 2015). Thus, at the AZM,  
492 despite the apparently less than ideal start to engagement, Terramin has clearly worked to  
493 improve the relationship between community, regulator and company and is now meeting  
494 many of these guidelines.

495 Although we only interviewed a small number of people from one location in South Australia,  
496 this is the first formal study to investigate what value people derived from participating in a  
497 consultative committee associated with a mine. Potentially, the results from this study might  
498 reflect that, at least after it closed, the relatively small AZM was not seen as a major issue in  
499 Strathalbyn and the town was not dependent on the mine economically; albeit there are still  
500 some ongoing concerns in the committee about the post-closure environmental management  
501 of the mine. Clearly, the AZM and SCCC have been something of a learning curve for all  
502 parties involved, but a clear message from the interviewees was that they saw value in  
503 participating in a consultative committee, both personally and for their community. We suspect  
504 these results will match others' experiences in many other places but suggest further research  
505 such as this is needed to explore when and under what circumstances consultative  
506 committees function effectively and less effectively.

507

## 508 **5. ACKNOWLEDGEMENTS**

509

510 We would like to thank the members of the Strathalbyn Community Consultative Committee  
511 who generously volunteered their time to talk with us and allowed us to learn from their  
512 experiences. We also thank the staff at Terramin, Joe Ranford, Matt Daniel and Katy Fetchner,  
513 for their ongoing support and recommendations. Dr. Edvard Glücksman provided helpful  
514 feedback on drafts of this manuscript. The research protocols used in this research were  
515 approved by the ethics committee of the University College London (ethics permit number is  
516 11669/001).

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